

Appl. No. 10/560,911
Amdt. dated February 18, 2009
Reply to Office action of December 10, 2008

REMARKS

Claims 13-19, 21 and 23-37 remain in this application.

In the advisory Action of October 16, 2008 the examiner made comments that the claims and arguments were not commensurate with each other. Further, the examiner seemed to imply that he may have suggestions as to how the claims might be amended to overcome the rejections. If this is so, any such suggestions would be greatly appreciated.

In the Office action the examiner rejected claims 13, 14, 23-27 and 29-37 as anticipated by Bessiere. However, it is pointed out that Bessiere does not teach the structure as recited in the independent claims 13, 25 and 37.

First, it must be pointed out a mechanical pump is not a pressure amplifier. A mechanical pump, whether it be operated manually, or by various other mechanical means, includes at least the following structure: a piston within a cylinder or some other form of expandible chamber, one or more valve elements, and a mechanical movement which moves to operate the expandible chamber. In the case of Bessiere this includes a cylinder 1 and a piston 2 which is physically moved by structure such as a cam on the engine, see Bessiere at column 2 lines 4-8. In opposition to this, a pressure amplifier is a **term of art** which defines structure which is not the same as a mechanical pump. A pressure amplifier includes: a cylinder arrangement with piston structure inside it, wherein the cylinder and piston structure are arranged so that there are at least three expandible chambers, which in applicants' disclosure are recited as a work chamber, a compression chamber and a differential pressure chamber. The work chamber has a larger diameter than the compression chamber so that when a fluid is pressurized into the work

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chamber, and pressure in the differential pressure chamber is properly controlled, the pressure of the fluid within the compression chamber will be greater than the pressure input into the work chamber. In other words, the pressure has been amplified.

An example of a pressure amplifier can be seen in applicants' figures 1 and 2. And if these two figures are compared, the operation can be discerned via the labels attached to the lines which lead to the three chambers.

Thus, Bessiere's pump does not qualify as, nor does Bessiere's disclosure teach, a pressure amplifier.

Nevertheless, by this amendment claim 13 has been revised so that structure which previously was recited in the claim by reason of the claim using the term "pressure amplifier", now is specifically recited piece by piece within the claim.

In particular with regard to the examiner's rejection, Bessiere does not teach a differential pressure chamber which controls a pressure amplifier, and which is now clearly recited in the claims.

And further, without teaching a differential pressure chamber, Bessiere cannot possibly include any teaching of a bore which connects the differential pressure chamber to a control valve so that the control valve can control the pressure in the differential pressure chamber and thus actuate the pressure amplifier.

Accordingly, the rejection of any of the claims under 35 USC 102 clearly is not proper, because the reference to Bessiere does not teach all of the structure which is recited in the claims.

As the examiner is probably aware, the structure disclosed in Bessiere is a pump operated by a cam on the engine. Bessiere does not in any way teach a pressure amplifier, and certainly does not teach a differential pressure chamber.

And further, the claims go on to recite that a control line leads to a valve which actuates the pressure amplifier by subjecting the differential pressure chamber to pressure or relieves it from such pressure. Since Bessiere does not include any such structure, clearly the rejection under 35 USC 102 is not a proper rejection.

The examiner has rejected claim 25 under 35 USC 102, explaining that somehow he is reading Bessiere's extension 6a of chamber 6 as being an encompassing groove in the cylindrical wall of the cylindrical chamber. This reading clearly is not warranted. Area 6a cannot be considered as anything other than an extension from the bottom, flat wall of chamber 6. It is clearly not a pocket or encompassing groove in the **cylindrical** wall of the cylindrical chamber.

It is pointed out that if area 6a is considered to be a modification of the cylindrical wall which forms area 6, it is in fact a protrusion from the cylindrical wall, not a groove in it as recited by claim 25.

The cylindrical wall which forms area 6a has smaller diameter than does the cylindrical wall which forms area 6. With this relationship, the cylindrical wall of area 6a thus extends from the cylindrical wall which forms area 6 towards the center of the cylinder, and thus it is a protrusion from the cylindrical wall which forms area 6. It cannot properly be considered to be a groove or recess in the cylindrical wall of area 6.

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Applicants believe that the proper consideration of area 6a is that it is a recess from the flat bottom wall of area 6. However, if the examiner still considers it to be a modification of the cylindrical wall of area 6, then as pointed out above, it is not a recess but must be considered to be a protrusion from the cylindrical wall.

Thus claim 25, and the claims which depend on it, recite structure which Bessiere does not have, and their rejection under 35 USC 102 clearly is not appropriate.

Furthermore, there is no structure of record in any of the prior art which would lead one skilled in the art to consider placing a pocket in the cylindrical wall of Bessiere's chamber 6.

With regard to claim 33, the examiner has indicated that figure 1 of Bessiere indicates that the conduits 11 and 23 are of rectangular shape. Contrary to the examiner's position, the cross section as shown in figure 1 of Bessiere does not indicate that conduits 11 and 23 are rectangular. The showing in figure 1 of Bessiere is appropriate for cylindrical bored conduits as well as for rectangular conduits, as well as being appropriate for conduits of many other shapes. The showing in the figures of Bessiere is generic to all of these many shapes. And Bessiere includes no recitation in the specification as to what shape conduits 11 and 23 should be. Since Bessiere has no written disclosure with regard to what shape the conduits are, it is not a fair reading to **assume**, as the examiner seems to have done, that the conduits shown by Bessiere are rectangular. The showing of the conduits in Bessiere's drawings are generic to many shapes. Therefor it is inappropriate for the examiner to reject claim 33 and the claims which depend on it under 35 USC 102, as there is no teaching in Bessiere of any rectangular shape, especially not the conduits.

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As further evidence of the above, it is requested that the examiner consider chamber 6, which Bessiere does disclose as being cylindrical. If the showing of chamber 6 is compared to the showing of conduits 11 and 23, the examiner will note that their showing has no difference, other than their sizes.

And moreover, most often conduits such as 11 and 23, which are formed within a more or less solid block of material, are formed by a boring process which makes cylindrical bores with circular openings. It would take an extra effort to make the conduits 11 and 23 of Bessiere rectangular. So for the examiner to somehow **assume** that they are rectangular when there is no reason for them to be rectangular, no teaching of their being rectangular, and making them rectangular would require extra effort and expense, making this assumption is simply not a fair reading and interpretation of Bessiere.

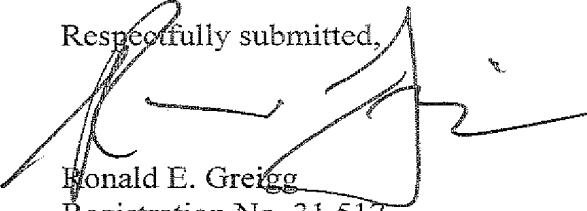
Clearly then, it is not proper for the examiner to have rejected claim 33 under 35 USC 102 since there is no teaching in Bessiere of the conduits being either oval or rectangular.

With regard to claims 24 and 36, the examiner's statement of rejection is clearly wrong. In the device of Bessiere only one bore, 23, leads into chamber 6a. Bore 11 leads into bore 23. Thus Bessiere has no teaching of at least two bores leading into the pocket or groove, and so a rejection of these claims under 35 USC 102 clearly is not proper.

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For all of the above reasons, whether singly or taken in combination with each other, entry of this amendment and allowance of the claims are courteously solicited.

Respectfully submitted,



Ronald E. Greigg
Registration No. 31,517
Attorney for Applicants
Customer No. 02119

GREIGG & GREIGG, P.L.L.C.
1423 Powhatan Street
Suite One
Alexandria, VA 22314

Tel. (703) 838-5500
Fax. (703) 838-5554

REG/SLS/ncr

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